Watershed Based Mitigation Subcommittee Work Plan

June 2003 Transportation Permit Efficiency and Accountability Committee
Prepared by: Dick Gersib, Watershed Program Manager

Background:
Conventional site-specific approaches to natural resource mitigation have failed to stop resource degradation. While federal, state, and local laws that regulate transportation projects seek to protect and maintain existing resource function, engineered fixes such as detention ponds, underground stormwater vaults, and created wetlands often fail to replace resources and functions lost. Even when effective, mitigation in the right-of-way may later have to be altered or removed if widening is required. This is wasteful, causes distrust among agencies, and forces us to search again for adequate sites.

Although resource agencies prefer "early action" mitigation, they often require considerable design detail when making regulator decisions, which pushes permitting to the end of the design process and can lead to project delays. Greater permitting certainty is needed to minimize this risk.

Finally, the cost of mitigating transportation impacts is increasing, at times exceeding 30% of the total project cost. New mitigation alternatives are needed to satisfy our commitment to taxpayers that environmental impacts are mitigated and project costs are minimized.

ESB 5279 Legislative Requirements:
TPEAC Reauthorization Legislation directs the committee to develop a work plan to complete and apply watershed based mitigation methods. This work plan must contain the following elements:

- Detailed work plan by 6/30/03
- Integrate watershed-based alternative mitigation policy into regulatory documents by 12/31/03
- Develop watershed decision-making tools 6/30/04
- Complete a test of technical and policy methods for a funded project by 12/31/04
- Integrate watershed mitigation policies, tools, and procedures by 6/30/05

What are "Watershed Characterization" methods?
It is series of steps that culminate in the identification and selection of the best site available for mitigating project impacts and providing the greatest resource value within existing regulatory guidelines. The steps identified in these methods focus on gathering pertinent watershed data needed to establish an understanding of where resources are and aren't functioning properly, where degraded natural resources exist, and where we can target mitigation to maximize environmental benefits.
In the end, the analysis allows WSDOT and resource agencies to choose mitigation sites that will provide the greatest functional replacement, have a high probability of being successful, and ensure that we will get the highest value for our investments.

The watershed method in brief:
- Assesses the project impacts
- Assesses cumulative impacts
- Identify the best use of habitat enhancement dollars

Where are we now?
Watershed-based methods have been developed and tested in a three-mile section of SR522 west of Monroe, WA. Peer review of the SR522 document has been finalized and methods are being revised.

The SR522 study showed that watershed scale methods can identify alternatives to traditional mitigation in rural and suburban areas. While this first application of watershed methods showed promise for future success, these methods must be applied in urban areas with more complex environmental constraints.

Why are we here today?
This paper presents an overview of the 2003/05 work plan Gantt chart developed by the TPEAC Watershed Subcommittee to address timelines established by ESB 5279 passed by the 2003 Legislature. Key tasks include:

Policy Integration
Watershed-scale alternative mitigation is new and existing mitigation policies need to be reviewed and revised to facilitate watershed-based alternatives. The Watershed Mitigation Subcommittee will begin an evaluation of existing mitigation policies that affect the use of watershed tools to help mitigate transportation impacts. The subcommittee will examine existing agency policy documents for consistency with new emerging watershed methods and develop recommendations on how to facilitate use of these new resource management tools. Such policies include, but are not limited to: Highway Runoff Manual, Alternative Mitigation Policy Guidelines, and Streambank Protection Guidance. Recommendations for policy revisions will be developed by 12/31/03 with full policy integration scheduled for 06/30/05.

Refine/Implement Watershed Methods
The North Renton section of I-405 has been selected to test methods in an urban setting. This section of I-405 will be used to develop low impact development concepts and least cost analysis tools and will serve as the first opportunity to apply watershed-based mitigation options on-the-ground. After methods refinement on North Renton, three additional projects will be identified that allow adaptation of watershed scale assessment and mitigation methodologies to smaller projects with shorter evaluation timeframes. These projects will be completed by 6/30/03 and help implement new mitigation policies.

Next Steps
- Secure staffing commitments from Ecology, Department of Fish and Wildlife, and US Army Corps of Engineers to complete the technical team.
- Secure staffing commitments for needed agency participation in subcommittee policy integration tasks.
- Begin watershed-based alternative mitigation planning on the North Renton section of I-405.
- Secure funding for staff and GIS technical support for alternative mitigation planning on other priority transportation projects.

TPEAC Budget and Staffing Needs
- *Integrate watershed mitigation policies, methods, and procedures* – 0.25 FTE each for WSDOT, Ecology, Fish and Wildlife, Corps of Engineers, NOAA Fisheries, and US Fish and Wildlife Service, Cities representative, and Counties representative. (2.0 Biennial FTE total)

- *Refine and Implement Watershed Methods* –.75 FTE for WSDOT technical staff, 0.5 FTE for Ecology Stormwater Engineer, 0.5 FTE for Department of Fish and Wildlife Fisheries Biologist, 0.25 FTE for Corps of Engineers wetland biologist. Tribal representatives should also be encouraged to participate in the subcommittee. (3.5 Biennial FTE total)

  Watershed Based Mitigation TPEAC budget total: $650,000.

Products
- Off site alternative mitigation options identified and prioritized for the North Renton section of I-405 and three other funded transportation projects for use by project engineers by June 30, 2005
- Mitigation alternatives identified and selected for three other projects.
- An early-action screening tool that identifies proposed transportation projects that have the greatest need for off site alternative mitigation options.
- Revised agency and interagency policy documents that recognize the value of watershed-based alternative mitigation planning and facilitates this type of planning when appropriate.